

Claims

1 Ticket printing device, in particular transport tickets, of the type including:

at least one thermal print head (24),

- driving means (26, 263, M2) arranged to move a ticket across the print head, presenting a first principal face of the ticket to the print head, and

- means of guidance (CG2, TG1, TG2) capable of imparting a direction of travel (D) to the ticket,

characterised in that said driving means include a block (26) applied against a second face of the ticket, opposite to the first principal face, and including a first powered rotating roller (261) capable of causing the ticket to move, and a second idling roller (262) , extending beyond the powered roller, which is used to drive tickets of different widths in the direction of travel (D).

2. Device according to claim 1, characterised in that the powered roller (261) and the idling roller (262) are respectively generally cylindrical in shape, substantially co-axial and similar in radius, and in that the motorised roller and the idling roller are substantially juxtaposed.

3. Device according to either of claims 1 and 2, characterised in that the guidance means include, facing the motorised roller (261), at least one wall parallel to an edge of the ticket, forming a tab (TG2) capable of defining the direction of travel (D) of the ticket, while the block (26) forms a chosen angle (α) with said direction of travel (D).

4. Device according to claim 3, characterised in that the the guidance means include, along the direction of travel, an upstream tab (TG1) and a downstream tab (TG2), substantially juxtaposed and placed on either side of the powered roller (261).

5. Device according to either of claims 3 and 4, characterised in that the block (26) forms, in the direction from the powered roller (261) towards the idling roller (262), with a direction of travel (D) of the ticket towards the

print head, an angle (α) of between 89° and 90° , preferably in the region of 89.7°

6. Device according to any of the preceding claims, characterised in that the thermal print head (24) includes a plurality of resistance heating elements (R) capable of releasing heat to enable printing of the ticket, and in that the device includes means (MES, MOD) to electrically test the resistance elements (R_{ij}), one by one, said testing means utilising an addressing module (MOD) for the resistance elements (R_{ij}).

7. Device according to any of the preceding claims, characterised in that it incorporates means of supporting the print head (24) including a flexible plate (224) fixed, on one hand, to the print head (24) and, on the other hand, to a mounting (25, 252) integral with the block (26), together with a rigid plate (221) fixed to the print head (24) and equipped with an end bar (222) substantially parallel to the direction of travel (D) and seated so as to rotate about an axis (A3) substantially parallel to this direction of travel (D) in an aperture (251) incorporated into the mounting (252), such that said rigid plate (221) is capable of preventing pitching motion of the print head (24) whilst at the same time allowing a rolling motion about said axis (A3).

8. Device according to claim 7, characterised in that it includes means of pushing (Em2, 22) the plate (221) against the block, the print head being in a position facing the block.

9. Device according to claim 8, characterised in that the pushing means include an electro-magnet (EM2) and are actuated electrically.

10. Device according to any of the preceding claims, characterised in that the thermal print head (24) is capable of printing barcodes on a ticket.

11. Device according to claim 10, characterised in that the ticket includes magnetic information, and in that the device additionally includes a magnetic recording head (PIL), while the print head (24) is arranged to operate in

